

New England Wind Offshore Wind Farm

Corrections and Clarification to Take Estimates for the Application for Marine Mammal Protection Act (MMPA) Rulemaking and Letter of Authorization

Prepared by:

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Submitted to:

Permits and Conservation Division,
Office of Protected Resources, NOAA Fisheries



1. Drilling Construction Schedule

1.1 Currently in Memo – Full Drilling Schedule

These schedules describe the days in which drilling activity may be needed for foundation installation. This information is currently included in Tables 2 and 3 of the *Updates to the Application for Marine Mammal Protection Act (MMPA) Rulemaking and Letter of Authorization Memo* (aka, “Memo”) document dated March 2023.

Construction Schedule A: Number of pile driving days during which drilling may be required, used in exposure estimation.

Month	Construction Schedule A		
	Year 2 (2026)	Year 3 (2027)	2-Year total
May	2	1	3
Jun	4	2	6
Jul	7	2	9
Aug	7	4	11
Sep	8	2	10
Oct	3	2	5
Nov	2	2	4
Dec	0	0	0
Total	33	15	48

Construction Schedule B: Number of pile driving days during which drilling may be required, used in exposure estimation.

Month	Construction Schedule B			
	Year 2 (2026)	Year 3 (2027)	Year 4 (2028)	3-Year total
May	2	1	1	4
Jun	4	4	2	10
Jul	3	4	2	9
Aug	4	4	1	9
Sep	4	4	1	9
Oct	2	1	1	4
Nov	1	1	1	3
Dec	0	0	0	0
Total	20	19	9	48

1.2 Not Currently in Memo – Drilling Schedule with Double Counting Days Removed

These schedules describe the days in which drilling Level B take estimates are included in the final take request. As written in Footnote c of Tables 2 and 3 within the Memo, “On the days with overlap between drilling and vibratory hammering, the estimated Level B takes resulting from drilling were not included to avoid double counting taken animals, because all animals within the larger vibratory hammering zone of influence were assumed to have already been taken by that activity.”

Therefore, Level B takes for 8 days of drilling in year 2 (2026) and 9 days of drilling in year 3 (2027) shown in Schedule A were thus not included in the total take estimates. Level B takes for 9 days of drilling in year 2 (2026), 2 days of drilling in year 3 (2027), and 2 days of drilling in year 4 (2028) shown in Schedule B were thus not included in the total take estimates.

Construction Schedule A: Number of pile driving days during which drilling exposures were counted in take estimation to avoid double counting Level B takes.

Month	Construction Schedule A		
	Year 2 (2026)	Year 3 (2027)	2-Year total
May	2	1	3
Jun	4	1	5
Jul	5	0	5
Aug	3	0	3
Sep	6	1	7
Oct	3	2	5
Nov	2	1	3
Dec	0	0	0
Total	25	6	31

Construction Schedule B: Number of pile driving days during which drilling exposures were counted in take estimation to avoid double counting Level B takes.

Month	Construction Schedule B			
	Year 2 (2026)	Year 3 (2027)	Year 4 (2028)	3-Year total
May	2	1	1	4
Jun	4	4	2	10
Jul	3	4	2	9
Aug	1	4	1	6
Sep	0	3	1	4
Oct	0	0	0	0

JASCO Applied Sciences
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Request for Letter of Authorization
for New England Wind

Nov	1	1	0	2
Dec	0	0	0	0
Total	11	17	7	35

2. Drilling Take Estimates

2.1 Currently in Memo (INCORRECT – contains copy errors)

These tables are currently in the Memo and are incorrect because they contain copy errors. These tables assume the full drilling schedule from Section 1.1, above. Double counting is included here and therefore is an overestimate of the Level B take estimates. These tables contain incorrect values and do NOT inform the final take request.

Table 32. Construction Schedule A: Estimated number of Level B takes from drilling during pile installation by year and for the full 2-year construction schedule assuming drilling is used on 36% of foundation positions.

Species		Year 2 (2026)	Year 3 (2027)	All Years Combined
LF	Fin whale ^b	78	46	32
	Minke whale	200	144	87
	Humpback whale	53	35	25
	North Atlantic right whale ^b	14	11	8
	Sei whale ^b	11	8	6
MF	Atlantic white-sided dolphin	494	335	230
	Atlantic spotted dolphin	41	24	20
	Common dolphin	4615	2718	2004
	Bottlenose dolphin, offshore	410	242	184
	Risso's dolphin	34	20	15
	Long-finned pilot whale	40	25	19
	Short-finned pilot whale	30	18	14
	Sperm whale ^b	18	10	8
HF	Harbor porpoise	396	277	189
PPW	Gray seal	226	182	127
	Harbor seal	508	408	285
	Harp seal	226	182	127

Table 33. Construction Schedule B: Estimated number of Level B takes from drilling during pile installation by year and for the full 3-year construction schedule assuming drilling is used on 36% of foundation positions.

Species	Year 2 (2026)	Year 3 (2027)	Year 4 (2028)	All Years Combined
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LF	Fin whale ^b	46	32	47	110
	Minke whale	144	87	131	287
	Humpback whale	35	25	32	77
	North Atlantic right whale ^b	11	8	8	22
	Sei whale ^b	8	6	6	16
MF	Atlantic white-sided dolphin	335	230	298	723
	Atlantic spotted dolphin	24	20	20	60
	Common dolphin	2718	2004	2555	6618
	Bottlenose dolphin, offshore	242	184	236	593
	Risso's dolphin	20	15	19	49
	Long-finned pilot whale	25	19	23	58
	Short-finned pilot whale	18	14	17	43
	Sperm whale ^b	10	8	10	25
HF	Harbor porpoise	277	189	219	585
PPW	Gray seal	182	127	132	353
	Harbor seal	408	285	296	793
	Harp seal	182	127	132	353

Table 34. Level B takes calculated for drilling during pile installation based on the higher of the take estimates from either Schedule A or Schedule B for each species. Used in the final take request.

Species		Level B take			
		Year 2 (2026)	Year 3 (2027)	Year 4 (2028)	3-Year total
LF	Fin whale ^b	78	46	47	110
	Minke whale	200	144	131	287
	Humpback whale	53	35	32	77
	North Atlantic right whale ^b	14	11	8	22
	Sei whale ^b	11	8	6	16
MF	Atlantic white-sided dolphin	494	335	298	723
	Atlantic spotted dolphin	41	24	20	60
	Common dolphin	4615	2718	2555	6618
	Bottlenose dolphin, offshore	410	242	236	593
	Risso's dolphin	34	20	19	49
	Long-finned pilot whale	40	25	23	58
	Short-finned pilot whale	30	18	17	43
	Sperm whale ^b	18	10	10	25

HF	Harbor porpoise	396	277	219	585
PPW	Gray seal	226	182	132	353
	Harbor seal	508	408	296	793
	Harp seal	226	182	132	353

2.2 Currently in Memo (CORRECTED – copy errors fixed)

These tables are currently in the Memo but have been corrected here. These tables assume the full drilling schedule from Section 1.1, above. Double counting is included here and therefore is an overestimate of the Level B take estimates. These tables do NOT inform the final take request.

Table 32. Construction Schedule A: Estimated number of Level B takes from drilling during pile installation by year and for the full 2-year construction schedule assuming drilling is used on 36% of foundation positions.

Species		Year 2 (2026)	Year 3 (2027)	All Years Combined
LF	Fin whale ^b	78	32	110
	Minke whale	200	87	287
	Humpback whale	53	25	77
	North Atlantic right whale ^b	14	8	22
	Sei whale ^b	11	6	16
MF	Atlantic white-sided dolphin	494	230	723
	Atlantic spotted dolphin	41	20	60
	Common dolphin	4615	2004	6618
	Bottlenose dolphin, offshore	410	184	593
	Risso's dolphin	34	15	49
	Long-finned pilot whale	40	19	58
	Short-finned pilot whale	30	14	43
	Sperm whale ^b	18	8	25
HF	Harbor porpoise	396	189	585
PPW	Gray seal	226	127	353
	Harbor seal	508	285	793
	Harp seal	226	127	353

Table 33. Construction Schedule B: Estimated number of Level B takes^a from drilling during pile installation by year and for the full 3-year construction schedule assuming drilling is used on 36% of foundation positions.

Species		Year 2 (2026)	Year 3 (2027)	Year 4 (2028)	All Years Combined
LF	Fin whale ^b	46	47	21	113
	Minke whale	144	131	67	341
	Humpback whale	35	32	17	83
	North Atlantic right whale ^b	11	8	6	24
	Sei whale ^b	8	6	5	18
MF	Atlantic white-sided dolphin	335	298	161	793
	Atlantic spotted dolphin	24	20	10	53
	Common dolphin	2718	2555	1118	6390
	Bottlenose dolphin, offshore	242	236	106	583
	Risso's dolphin	20	19	8	46
	Long-finned pilot whale	25	23	11	58
	Short-finned pilot whale	18	17	8	43
	Sperm whale ^b	10	10	4	23
HF	Harbor porpoise	277	219	132	628
PPW	Gray seal	182	132	97	410
	Harbor seal	408	296	217	920
	Harp seal	182	132	97	410

Table 34. Level B takes calculated for drilling during pile installation based on the higher of the take estimates from either Schedule A or Schedule B for each species. Used in the final take request.

Species	Level B take				
	Year 2 (2026)	Year 3 (2027)	Year 4 (2028)	3-Year total	
LF	Fin whale ^b	78	47	21	113
	Minke whale	200	131	67	341
	Humpback whale	53	32	17	83
	North Atlantic right whale ^b	14	8	6	24
	Sei whale ^b	11	6	5	18
MF	Atlantic white-sided dolphin	494	298	161	793
	Atlantic spotted dolphin	41	20	10	60
	Common dolphin	4615	2555	1118	6618

	Bottlenose dolphin, offshore	410	236	106	593
	Risso's dolphin	34	19	8	49
	Long-finned pilot whale	40	23	11	58
	Short-finned pilot whale	30	17	8	43
	Sperm whale ^b	18	10	4	25
HF	Harbor porpoise	396	219	132	628
PPW	Gray seal	226	132	97	410
	Harbor seal	508	296	217	920
	Harp seal	226	132	97	410

2.3 Not Currently in Memo – Drilling Takes with Double Counting Removed

These tables are intended to replace Tables 32 – 34 that are currently in the Memo. These tables assume the drilling schedules from Section 1.2, above, in which days of drilling have been removed when the activity occurs on the same day as vibratory driving. Double counting is NOT included here and therefore **these tables DO inform the final take request.**

Table 32. Construction Schedule A: Estimated number of Level B takes from drilling during pile installation by year and for the full 2-year construction schedule assuming drilling is used on 36% of foundation positions.

Species		Year 2 (2026)	Year 3 (2027)	All Years Combined
LF	Fin whale ^b	55	9	63
	Minke whale	164	42	205
	Humpback whale	43	12	55
	North Atlantic right whale ^b	13	5	18
	Sei whale ^b	10	4	13
MF	Atlantic white-sided dolphin	417	125	542
	Atlantic spotted dolphin	34	13	47
	Common dolphin	3507	889	4396
	Bottlenose dolphin, offshore	302	67	368
	Risso's dolphin	25	6	30
	Long-finned pilot whale	31	8	38
	Short-finned pilot whale	23	6	28
HF	Sperm whale ^b	12	3	14
HF	Harbor porpoise	328	109	436

PPW	Gray seal	213	88	300
	Harbor seal	477	198	675
	Harp seal	213	88	300

Table 33. Construction Schedule B: Estimated number of Level B takes^a from drilling during pile installation by year and for the full 3-year construction schedule assuming drilling is used on 36% of foundation positions.

Species		Year 2 (2026)	Year 3 (2027)	Year 4 (2028)	All Years Combined
LF	Fin whale ^b	29	45	20	92
	Minke whale	107	123	63	292
	Humpback whale	23	29	13	64
	North Atlantic right whale ^b	9	8	5	20
	Sei whale ^b	7	6	4	15
MF	Atlantic white-sided dolphin	219	264	125	607
	Atlantic spotted dolphin	5	13	5	21
	Common dolphin	1091	2142	817	4050
	Bottlenose dolphin, offshore	125	212	83	419
	Risso's dolphin	8	16	6	30
	Long-finned pilot whale	14	21	9	43
	Short-finned pilot whale	10	16	7	31
	Sperm whale ^b	4	9	3	15
HF	Harbor porpoise	195	199	109	501
PPW	Gray seal	155	124	73	351
	Harbor seal	348	277	164	788
	Harp seal	155	124	73	351

Table 34. Level B takes calculated for drilling during pile installation based on the higher of the take estimates from either Schedule A or Schedule B for each species. Used in the final take request.

Species	Level B take				
	Year 2 (2026)	Year 3 (2027)	Year 4 (2028)	3-Year total	
LF	Fin whale ^b	55	45	20	92
	Minke whale	164	123	63	292
	Humpback whale	43	29	13	64
	North Atlantic right whale ^b	13	8	5	20

	Sei whale ^b	10	6	4	15
MF	Atlantic white-sided dolphin	417	264	125	607
	Atlantic spotted dolphin	34	13	5	21
	Common dolphin	3507	2142	817	4050
	Bottlenose dolphin, offshore	302	212	83	419
	Risso's dolphin	25	16	6	30
	Long-finned pilot whale	31	21	9	43
	Short-finned pilot whale	23	16	7	31
	Sperm whale ^b	12	9	3	15
HF	Harbor porpoise	328	199	109	501
PPW	Gray seal	213	124	73	351
	Harbor seal	477	277	164	788
	Harp seal	213	124	73	351

3. Impact Pile Driving Take Estimates

3.1 Not Currently in Memo – Impact Pile Driving Takes with Double Counting Removed (FOR COMPARISON PURPOSES ONLY)

NMFS requested that the Proponent explore the possibility of removing double counting of Level B impact pile driving take estimates on days where impact driving may occur on the same day as either vibratory and/or drilling activity. If double counting of Level B take estimates is removed, the reduction to the overall take request is trivial. For demonstration purposes, the Proponent has completed an exercise where impact pile driving double counting was removed for North Atlantic right whale and common dolphin for both Construction Schedule A and B, and annual takes were calculated from the modeled exposure estimates using the same methodology as elsewhere. Shown below is an extract from Table 38, the requested take table, before and after this change. This exercise was completed for comparison purposes only, and the Proponent does not intend to adjust the final take request based on these results.

As shown below, the difference between the North Atlantic right whale take as an annual maximum percentage of stock size is only about 1% or less. For common dolphins, the difference is, at most, 2-3% per year. Given the trivial nature of the change, the Proponent is not adjusting the take request for the proposed rule based on these results.

Currently in the LOA Memo

Extract from Table 1. Requested Level A and Level B takes^a by year for all activities for the effective period of the LOA (5-year total, 2025 – 2029).

Species	Population Size	Year 1 (2025) ^b			Year 2 (2026)			Year 3 (2027)			Year 4 (2028)			Year 5 (2029)			
		Level A	Level B	Max %	Level A	Level B	Max %	Level A	Level B	Max %	Level A	Level B	Max %	Level A	Level B	Max %	
LF	North Atlantic right whale ^c	368	0	19	5.16	0	115	31.25	0	114	30.98	0	55	14.95	0	5	1.36
MF	Common dolphin	172,974	1	222	0.13	9	36693	21.22	3	46505	26.89	1	16514	9.55	0	203	0.12

After removing impact driving takes on days when vibratory setting and/or drilling also occur

Extract from Table 2. Requested Level A and Level B takes^a by year for all activities for the effective period of the LOA (5-year total, 2025 – 2029).

Species	Population Size	Year 1 (2025) ^b			Year 2 (2026)			Year 3 (2027)			Year 4 (2028)			Year 5 (2029)			
		Level A	Level B	Max %	Level A	Level B	Max %	Level A	Level B	Max %	Level A	Level B	Max %	Level A	Level B	Max %	
LF	North Atlantic right whale ^c	368	0	19	5.16	0	112	30.43	0	110	29.89	0	54	14.67	0	5	1.36
MF	Common dolphin	172,974	1	222	0.13	9	33317	19.27	3	40940	23.67	1	14605	8.44	0	203	0.12

4 Number of Takes Requested – All Activities (fixed)

The final take request from the Memo for the 5-year total has been fixed slightly, below. An adjustment was only necessary due to a copy error of the Level B take summation for seals. This error is only present in the final take table, Table 39 of the Memo, and is not present in any other Memo tables. To be clear, the corrections above in Section 2 for the drilling take estimates have no effect on the final request because the drilling copy errors were isolated to Memo Tables 32 – 34 and were not carried forward into the final take calculation tables.

The two tables below should be considered the Proponent’s final take request for the New England Wind Offshore Wind Farm project (rare species take request tables are not included in this document but are still being requested – see the LOA Application, dated July 2022). Table 38 is unchanged from the Memo, but is copied here for completeness. Table 39 required a minor fix to the Level B seal totals due to the copy error. The red text within Table 39 indicates where edits are made.

Table 3. Requested Level A and Level B takes^a by year for all activities for the effective period of the LOA (5-year total, 2025 – 2029).

Species	Population Size	Year 1 (2025) ^b			Year 2 (2026)			Year 3 (2027)			Year 4 (2028)			Year 5 (2029)			
		Level A	Level B	Max %	Level A	Level B	Max %	Level A	Level B	Max %	Level A	Level B	Max %	Level A	Level B	Max %	
LF	Fin whale ^c	6,802	1	11	0.18	10	498	7.47	20	590	8.97	9	214	3.28	0	4	0.06
	Minke whale	21,968	4	41	0.20	34	1013	4.77	85	1198	5.84	38	549	2.67	0	13	0.06
	Humpback whale	1,396	1	8	0.64	10	305	22.56	16	341	25.57	7	148	11.10	0	3	0.21
	North Atlantic right whale ^c	368	0	19	5.16	0	115	31.25	0	114	30.98	0	55	14.95	0	5	1.36
	Sei whale ^c	6,292	1	6	0.11	2	55	0.91	2	55	0.91	1	31	0.51	0	2	0.03
MF	Atlantic white-sided dolphin	93,233	1	31	0.03	2	3016	3.24	1	3537	3.79	1	1605	1.72	0	28	0.03
	Atlantic spotted dolphin	39,921	1	31	0.08	1	552	1.39	0	684	1.71	0	238	0.60	0	30	0.08
	Common dolphin	172,974	1	222	0.13	9	36693	21.22	3	46505	26.89	1	16514	9.55	0	203	0.12
	Bottlenose dolphin, offshore	62,851	1	20	0.03	2	3434	5.47	1	4238	6.74	1	1541	2.45	0	18	0.03
	Risso’s dolphin	35,215	1	8	0.03	2	641	1.83	1	820	2.33	1	249	0.71	0	7	0.02
	Long-finned pilot whale	39,215	1	18	0.05	2	328	0.84	1	395	1.01	1	160	0.41	0	17	0.04
	Short-finned pilot whale	28,924	1	10	0.04	2	239	0.83	1	289	1.00	0	113	0.39	0	9	0.03
	Sperm whale ^c	4,349	1	3	0.09	2	119	2.78	1	146	3.38	1	46	1.08	0	2	0.05
HF	Harbor porpoise	95,543	56	296	0.37	122	2558	2.81	136	2742	3.01	60	1169	1.29	0	79	0.08
PPW	Gray seal	27,300	8	346	1.30	6	3918	14.37	3	4412	16.17	2	2196	8.05	0	200	0.73
	Harbor seal	61,336	17	776	1.29	11	8806	14.37	7	9929	16.20	4	4956	8.09	0	448	0.73
	Harp seal	7,600,000	8	346	0.00	6	3926	0.05	3	4426	0.06	1	2207	0.03	0	200	0.00

^a For days when pile installation includes both vibratory setting and drilling, only the vibratory setting Level B takes are included (because more takes are predicted for this activity) and not the drilling Level B takes to avoid double counting.

^b For the purpose of this take request update, Year 1 is assumed to be 2025. These dates reflect the currently projected construction start year and are subject to change because exact project start dates and construction schedules are not currently available.

^c Listed as Endangered under the ESA.

Table 4. Summary of requested Level A and Level B takes^a for all activities for the effective period of the LOA (5-year total, 2025 – 2029).

	Species	Population Size	5 Year Total		
			Level A	Level B	Max Percent
LF	Fin whale ^b	6,802	37	1283	19.41
	Minke whale	21,968	155	2739	13.17
	Humpback whale	1,396	31	779	58.02
	North Atlantic right whale ^b	368	0	300	81.52
	Sei whale ^b	6,292	6	142	2.35
MF	Atlantic white-sided dolphin	93,233	3	7940	8.52
	Atlantic spotted dolphin	39,921	2	1499	3.76
	Common dolphin	172,974	10	95901	55.45
	Bottlenose dolphin, offshore	62,851	3	9020	14.36
	Risso's dolphin	35,215	3	1676	4.77
	Long-finned pilot whale	39,215	3	890	2.28
	Short-finned pilot whale	28,924	3	639	2.22
	Sperm whale ^b	4,349	3	302	7.01
HF	Harbor porpoise	95,543	352	6636	7.31
PPW	Gray seal	27,300	17	11001 (was 10970)	40.36 (was 40.25)
	Harbor seal	61,336	37	24737 (was 24723)	40.39 (was 40.37)
	Harp seal	7,600,000	17	11024 (was 11011)	0.15 (unchanged)

^a For days when pile installation includes both vibratory setting and drilling, only the vibratory setting Level B takes are included (because more takes are predicted for this activity) and not the drilling Level B takes to avoid double counting.

^b Listed as Endangered under the ESA.